

# Contact RDR Technologies: 405-306-3062 PRODUCT DATA SHEET

## **Contego HS Intumescent Fire Barrier Latex** HIGH SOLIDS



**General Description:** Contego PFB is a full-bodied latex, single component coating designed to protect a wide range of building materials including structural steel, aluminum, dimensional lumber, manufactured wood products, trusses, drywall, spray polyurethane foam insulation, HDPE wall panels, concrete, plaster, solid core doors and more. The product may also be used for conduit, decking and cladding. Refer to our architectural specification for more details.

## **Technical Data:**

Color White Specific Gravity 1.35 8.0-8.5 pH Range 11.2 lbs (5.08 Kgs)\* Weight/Gal Hazardous Ingredients N/A Volume Solids 68.3% (+/- 2%) Weight Solids 66.0% (+/- 2%) 130 Kreb Units (+/- 10%) Viscosity Flammability Not Flammable VOC. (LESS WATER) .01 GRAMS /LITRE (Nil)



\*Does not include weight of packaging.

**Application Conditions:** Contego PFB is designed to be applied by spray application and should only be applied by brush or roller for touch up purposes. Contego PFB should not be applied when the relative humidity exceeds 80% or the surface to be coated is less than 40°F (5°C) or less than 15°F (-9°C) above the current or forecasted dew point. The product is best applied when ambient temperatures are between 50°F (10°C) and 95°F (35°C). While the product can be applied at lower temperatures, viscosity may be a problem and, if applied at higher than recommended temperatures, there may be a risk of runs or sags. Once applied and cured, extremely low or high temperatures should not be a problem. On combustible substrates such as dimensional lumber, manufactured wood (Oriented Strand Board, Particle Board, Plywood, etc.), Polyurethane foam, and drywall (GWB) a primer is not required but may be useful if:

**Dimensional Lumber** The wood is very old and/or dry and would likely absorb too much of the Contego coating.

Manufactured Wood The substrate is very old and/or dry or if the resin content is unusually high.

Polyurethane Foam The foam is soy-based or made from other organics that emit a vegetable oil.

Drywall (GWB) The drywall has been previously painted with oil-based (alkyd) paint or if you're not sure.

On structural steel and other metals such as aluminum, copper, brass, or composites, - a primer is *always* required.

No exceptions have been observed regarding what kind or brand of primer can be used. Even inexpensive shop primer has shown no incompatibilities. However, doing a test patch is always recommended with any new combinations of primer and our product since it is impossible to have tested every product from every manufacturer.

**Drying & Cure Times at Standard Ambient Temperature and Humidity:** As with any latex coating, drying time is always a function of ambient temperature, ambient humidity and how thickly the coating was applied. However, at  $60^{\circ}F(15^{\circ}C)$  with a relative humidity of 70%, a 20 mil (500µ) wet coat should be dry to touch within 3 hours, completely dry in 6 hours and dried hard enough to handle in 8 hours. While our specifications call for a 72 hour cure time, the product is active as soon as it is hard dried.

**DO NOT** apply additional coats until you are sure the underlying coats are completely dry. Applying additional coats on top of product that still has moisture may cause the finish to crack and, if enough moisture is trapped under a surface film, the entire finish may delaminate and fall off. Top coating is recommended and permitted after the total number of required thickness of Contego has been applied and completely dried.

## **HS Product Advantages:**

- Exceptional protection from heat and fire.
- Smooth, thin, architectural grade finish.
- Top coat with whatever you prefer alkyds, acrylics or lacquer.
- Big Plus with HS apply half as many coats with the same coverage.
- Nontoxic, nondermatic and noncarcinogenic latex.
- Can be pre-applied to steel and other material during fabrication and is easy to repair.
- Designed specifically for sprayer application. No special equipment is required. Any qualified contractor can apply it.
- Interior or exterior application (use an exterior grade top coat for exterior applications).
- Economically priced.
- Fast drying and curing times.
- Cleans up with soap and water.
- No shelf life limitations and does not need to be periodically reapplied.

## **PRODUCT DATA SHEET**



## CONTINUED

## **Contego HS Intumescent Fire Barrier Latex** HIGH SOLIDS



**Required Coating Thickness:** Current recommendations are a maximum wet film thickness of 36 mils (915 $\mu$ ), drying to 24 mils (610 $\mu$ ). The big advantage is impressive savings in application and labor costs and time. For structural steel applications, refer to our calculator to determine required thickness for various substrates, densities and required ratings. Contact a qualified Contego representative with further questions.

## **General Guidelines for Coating Thickness Requirements:**

Dimensional Lumber - Up to 2 hours depending on the size of the wood and the thickness of Contego applied. (20 mils/500μ dft) Manufactured Wood - Up to 2 hours depending on the size of the wood and the thickness of Contego applied. (20 mils/500μ dft) Polyurethane Foam - Meets the 15 minute thermal barrier requirements of IBC-2603. (15 - 20 mils/380-500μ dft) Drywall (GWB) - Contego adds 55 minutes to any type of GWB. (15 mils/380μ dft) Structural Steel - Contego provides up to 3 hours restrained depending on the W/D, Hp/A or A/P of the steel and the thickness of Contego applied. (8 - 200 mils / 200-5000μ dft refer to our steel calculator) Aluminum Columns have been tested for 2 hours. Aviation grade .025 panels for an estimated 4+ hours. (20 - 50 mils/500 - 1270μ dft)

All applications are enhanced by 25% to 32% when top coated with a finish coat of your preference. Test results were based on comparative performance with a top coat of oil-based alkyd.

### **Precautions:**

- Do not mix, thin or dilute the Contego product with anything else.
- Do not allow the product to freeze. If frozen, the texture will be obviously different. Discard it.
- Do not store in temperatures above 105°F (40°C) for extended periods of time.
- Do not expose the product to rain, snow, dew or extreme humidity until top coated.

**Warranty:** Contego products are warranted for ten years from date of application against material defects. Proof of purchase (store receipt and bar code from can) is required for warranty claims. Claims are limited to replacement of product only. The manufacturer accepts no responsibility for other losses or claims and the user waives such claims by breaking the seal on the can.

**Testing:** Contego products are tested to a variety of standards such as UL, ULC, ASTM, NFPA, UBC, CEN, ISO, and others by the best independent fire testing laboratories available. Contego uses Underwriters Laboratories (UL), Intertek, Western Fire Center, Southwest Research Institute (SwRI), Omega Point, Guardian Laboratories, SGS/USTesting, KTA, Materials Analytical Services, MAGI and more. All labs are certified, accredited and audited. Test results are available online at **www.contegointernational.com** or can be obtained on DVD by contacting our customer services department or your local representative.

Contact:	•	ASTM E-84.98 (UL-723) Class A Flame Spread & Smoke Production		
Distributed by RDR Technologies, LLC	•	ASTM E-119 (UL-263, UBC 7.1, ANSI A2.5, etc.) 1 Hour 45 min. Dimension lumber decking system.		
835 SE 30th St., Suite C Oklahoma City, OK 73129		BC-26.3 – Thermal Barrier Test for Interior Foam Plastic Systems.		
405-306-3062	•	UBC-26.2 – Thermal Barrier for both standard and HUD applications.		
doug@rdrtechnologies.com		NFPA-286 – Contribution to Room Combustibility.		
Contego International, Inc. (USA)	•	Toxicity Data (Zero toxicity/No HAZMAT)		
PO Box 684 Westfield, IN 46074	•	Vapor Barrier Test – ASTM E-283-04		
westheid, in 40074		Adhesion Test – ASTM D3359, Method A and Method B		



## SAFETY DATA SHEET

Issuing Date	No data available	Revision Date	4-Aug-2016	Revision Number	0
		1.	IDENTIFICA	TION	
GHS product	<u>identifier</u>				
Product Name	9	Contego HS	Intumescent Fi	re Barrier Latex (High Solids Ve	ersion)
Other means	of identification				
Synonyms		None			
<u>Recommende</u>	d use of the chemical	and restrictions	<u>on use</u>		
Recommende	d Use	Fire barrier pa	aint		
Uses advised	against	No informatio	n available		
Supplier's det	ails				
P.O. Box 4 1013 Arthu	iternational, Inc. 9 ir Street IN 46975				
Emergency te	lephone number				
Emergency To Number	elephone	1-800-434-64	44		
		2. HAZ	ARDS IDENT	FICATION	
<u>Classificatio</u>	<u>n</u>				
This chemical	is not considered hazar	dous according to	the OSHA Haza	ard Communication Standard 201	2 (29 CFR 1910.1200).
Not classified					
GHS Label ele	ements, including pre	cautionary state	<u>ments</u>		
		Er	nergency Ove	rview	
Signal Word		None			
The p	product contains no sub	ostances which at	their given conc	entration are considered to be ha	zardous to health
Appearance V	Vhite.	Physical St	t <b>ate</b> Liquid.		<b>Odor</b> Mild.

#### 2. HAZARDS IDENTIFICATION - Continued

#### **Precautionary Statements**

#### Prevention

None

#### General Advice

None

#### Storage

None

#### Disposal

None

#### Hazard Not Otherwise Classified (HNOC)

Not applicable.

#### **Other information**

If product is removed by sanding or grinding may produce dust particulates.

<50% of the mixture consists of ingredient(s) of unknown toxicity.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Proprietary Formulation** 

#### **4. FIRST AID MEASURES**

#### **Description of necessary first-aid measures**

Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Get medical attention if symptoms occur.		
Skin Contact	Wash skin with soap and water. Remove and wash contaminated clothing before re-use. If skin irritation occurs: Get medical advice/ attention.		
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.		
Ingestion	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician if necessary.		
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.		
Most important symptoms/effects, acute and delayed			

# Most Important Symptoms/Effects No information available. Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician Treat symptomatically.

#### **5. FIRE-FIGHTING MEASURES**

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media None

#### Specific Hazards Arising from the Chemical

None known

Explosion Data

Sensitivity to Mechanical Impact

Sensitivity to Static Discharge None.

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

None.

Personal precautions, protective equipment and emergency procedures					
Personal Precautions	Avoid contact with the skin and the eyes. Use personal protective equipment as required.				
Environmental Precautions					
Environmental Precautions	See Section 12 for additional Ecological Information.				
Methods and materials for containme	ent and cleaning up				
Methods for Containment	Prevent further leakage or spillage if safe to do so.				
Methods for Cleaning Up	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.				
7. HANDLING AND STORAGE					
Precautions for safe handling					
Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Use personal protective equipment as required. Do not take				
	internally. Wash thoroughly after handling. Avoid sanding and grinding surfaces containing dried paint film.				
Conditions for safe storage, includin	containing dried paint film.				
<u>Conditions for safe storage, includin</u> Storage	containing dried paint film.				

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Control parameters**

#### **Exposure Guidelines**

Chemical Name	Chemical Name ACGIH TLV		NIOSH IDLH
Pentaerythritol 115-77-5	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup>
Aluminum hydroxide 21645-51-2	TWA: 1 mg/m <sup>3</sup> respirable fraction	-	-
Glass, oxide 65997-17-3	TWA: 1 fiber/cm3 TWA: 5 mg/m <sup>3</sup> inhalable fraction	-	-

#### Appropriate engineering controls

#### **Engineering Measures**

Showers Eyewash stations Ventilation systems

#### Individual protection measures, such as personal protective equipment

Eye/Face Protection	At minimum, wear safety glasses with side shields. Goggles are preferred, especially with spray applications
Skin and Body Protection	Wear latex, vinyl, or nitrile gloves and a long sleeved work or jump suit such as Tyvek or similar.
Respiratory Protection	A dust mask is recommended to protect against exposure to airborne particulates or mists. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Physical State Odor	Liquid. Mild.	Appearance Odor Threshold	White. No information available.
<u>Property</u>	<u>Values</u>	<u>Remarks / N</u>	<u>lethod</u>
pH Melting Point/Range Boiling Point/Boiling Range Flash Point Evaporation rate Flammability (solid, gas) Flammability Limits in Air upper flammability limit lower flammability limit Vapor Pressure Vapor Density Specific Gravity Water Solubility Solubility in other solvents Partition coefficient: n-octand Autoignition Temperature	8.0 - 8.5 No data available 100 °C / 212 °F Not flammable. No data available No data available No data available No data available No data available 1.3 – 1.5 No data available No data available No data available No data available No data available No data available	None known None known	t stated at a given temperature
Viscosity	> 15,000 cTs	None known	

#### 9. PHYSICAL AND CHEMICAL PROPERTIES - Continued

**Flammable Properties** 

Not flammable

Explosive Properties Oxidizing Properties No data available No data available

#### **Other information**

VOC Content (%) VOC (g/l) Negligible 0.01

#### **10. STABILITY AND REACTIVITY**

#### **Reactivity**

No data available.

#### **Chemical stability**

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

None under normal processing.

#### **Hazardous Polymerization**

Hazardous polymerization does not occur.

#### **Conditions to avoid**

Incompatible products.

#### Incompatible materials

Strong acids. Strong oxidizing agents.

#### Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx).

#### **11. TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure

Product Information Inhalation Eye Contact Skin Contact Ingestion

No known hazard by inhalation. Contact with eyes may cause irritation. No known hazard in contact with skin. No known hazard by swallowing.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Pentaerythritol	= 10000 mg/kg (Rat)	-	-
Titanium dioxide	> 10000 mg/kg (Rat)	-	> 6820 mg/m <sup>3</sup>
Aluminum hydroxide	> 5000 mg/kg (Rat)	-	-

#### Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

No information available.

#### **11. TOXICOLOGICAL INFORMATION - Continued**

#### Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization Mutagenic Effects Carcinogenicity	Not expected to be a sensitizer. No information available. This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. However, this product may
	become a dust nuisance when removed by abrasive blasting, sanding, or grinding.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide		Group 2B		Х
Glass, oxide		Group 3		
Silica, amorphous, precipitated and gel		Group 3	Reasonably Anticipated	Х

#### IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans Group 3 - Not Classifiable as to its Carcinogenicity to Humans

#### NTP: (National Toxicity Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

#### OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration Hazard	No information available.

#### Numerical measures of toxicity - Product

**Acute Toxicity** 

<50% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral

4425 mg/kg; Acute toxicity estimate

#### **12. ECOLOGICAL INFORMATION**

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Pentaerythritol 115-77-5		LC50 48 h: = 50000 mg/L semi-static (Oryzias latipes)		EC50 48 h: 30477 - 37043 mg/L Static (Daphnia magna) EC50 24 h: = 38900 mg/L (Daphnia magna)

#### Persistence and Degradability

No information available.

Bioaccumulation

No information available.

#### **Other Adverse Effects**

No information available.

13. DISPOSAL CONSIDERATIONS				
Waste Disposal Methods	This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.			
Contaminated Packaging	Do not re-use empty containers.			
14. TRANSPORT INFORMATION				
DOT	Not regulated			
TDG	Not regulated			
MEX	Not regulated			
ICAO	Not regulated			
IATA	Not regulated			
IMDG/IMO	Not regulated			
RID	Not regulated			
ADR	Not regulated			
ADN	Not regulated			

#### **15. REGULATORY INFORMATION**

#### **International Inventories**

TSCA DSL All ingredients are on the inventory or exempt from reporting. Not determined

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

#### **U.S. Federal Regulations**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **15. REGULATORY INFORMATION - CONTINUED**

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### U.S. State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Titanium dioxide	13463-67-7	Carcinogen

#### U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Melamine	Х	Х	Х		
Pentaerythritol	Х	Х	Х		Х
Titanium dioxide	Х	Х	Х	-	Х

#### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION					
<u>NFPA</u>	Health Hazard 1	Flammability 0	Instability 0	Physical and Chemical Hazards -	
<u>HMIS</u>	Health Hazard 1	Flammability 0	Physical Hazard 0	Personal Protection X	
Revision Date Revision Note					

#### **General Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

PREPARED BY:	Comprehensive Safety Compliance, Inc. (CSC) Occupational Health and Safety Consultant (412) 826-5480	VERSION NO.: 1	APPROVAL DATE: 8/4/16
MFR. CONTACT	: Contego International, Inc. P.O. Box 49 1013 Arthur Street Rochester, IN 46975 TEL: 1-317-580-0655	SUPERSEDES SDS DAT	FED: N/A

**End of Safety Data Sheet**